

**First Aid for the Basic Sciences: Organ Systems, 3rd edition**  
**Official Errata: Corrections and Clarifications**  
**January 15, 2018**

Despite our best efforts, errors do occur during the revision process. This list primarily addresses direct content errors that may create confusion. We also have listed selected clarifications. Please be aware, however, that this list does not represent the entire scope of additions, improvements, and clarifications made in the 3rd edition.

We check every submission against your reference(s), authoritative references, and expert faculty to maximize clarity and accuracy. Please note that our goal is to provide a high-yield framework for optimal exam preparation and not a comprehensive textbook. If you were the first individual to submit a referenced correction or clarification to us at [www.firstaidteam.com](http://www.firstaidteam.com) that appears in the errata or in the next edition of the book, you will receive a gift certificate in appreciation. Good luck with your studies!

–The First Aid/USMLE-Rx Team

Page	Section	Revision
4	Clinical Correlation	Replace “arteriosis” with “arteriosus.”
10	Figure 1-10B	Move the marker for tricuspid down so that it appears within the left, fifth intercostal space.
12	Answer Flashcard	Replace “Located in the posterior of the heart at the junction between the RA and RV” with “Located in the posterior of the heart at the junction between the LA and LV....”
18	Table 1-5	In the Slow Pacemaker Action Potential column, replace “1. Increased $I_{K+}$ ” with “3. Increased $I_{K+}$ .”
22	Figure 1-20	Narrow the length of the bracket indicating sarcomere so that it encompasses Z line to Z line.
27	Cardiac and Vascular Function Curves	In the last sentence of the paragraph, delete the second “because.”
30	Key Fact	Replace both bullets with “Heart valves open when pressure upstream < pressure downstream and close when pressure downstream < pressure upstream.”
31	Jugular venous pulses	Replace “mirrors left atrial pressure (LAP) since the LA is continuous with jugular vein via the SVC” with “mirrors right atrial pressure (RAP) since the RA is continuous with jugular vein via the SVC....”
38	Figure 1-35	In the bottom portion of the figure, replace “Angiotensin → Angiotensin I” with “Angiotensinogen → Angiotensin I.”
71	Aortic Valve Regurgitation	In the fifth bullet of the Presentation section, replace “heard best at the second right intercostal space” with “heard best at the left second intercostal space....”
82	Flash Back	Replace “is often seen in Churg-Strauss syndrome” with “is often seen in eosinophilic granulomatosis with polyangiitis....”

84	Churg-Strauss Syndrome	Replace “Churg-Strauss Syndrome” with “Eosinophilic granulomatosis with polyangiitis (Churg-Strauss)”.  In the first paragraph, replace “Churg-Strauss syndrome” with “Eosinophilic granulomatosis with polyangiitis....”
91	Figure 1-77	Below Sympatholytics, replace “ $\alpha$ -agonists” with “ $\alpha_2$ -agonists.”  Below Vasodilators, replace “ $\beta_2$ -blockers” with “ $\beta_2$ -agonists.”
100	Table 1-39	In the Ace Inhibitors column of the AT 1 row, replace “ $\downarrow$ ” with “ $\uparrow$ ”.  In the Aliskiren/Direct Renin Inhibitor column of the Renin row, replace “ $\downarrow$ ” with “ $\uparrow$ .”
101	$\beta$ -Blockers (eg, Metoprolol, Atenolol, Propranolol)	In the second sentence of the Side Effects section, replace “selective for $\beta_2$ -receptors” with “selective for $\beta_1$ -receptors....”
130	Key Fact (second on page)	In the second paragraph, replace “in persons who fail to manifest the Wolff-Chaikoff effect” with “in persons who were experiencing deficiency.”
148	Figure 2- 26	Replace “Indoderm” with “Endoderm”
149	Figure 2-27	Between 17-hydroxypregnenolone $\rightarrow$ Dehydroepiandrosterone (DHEA), and between 17-hydroxyprogesterone $\rightarrow$ Androstenedione, replace “17 $\alpha$ -hydroxylase” with “17,20-lyase.”
151	Actions of Cortisol	In the second sentence of the first bullet below Anti-inflammatory effects, replace “arachadonic acid” with “arachidonic acid.”
154	Diagnosis	In the first sentence, replace “24-urine” with “24-hour urine.”
157	Table 2-25	In the Mineralocorticoids column of the 21-hydroxylase row, replace “ $\uparrow$ ” with “ $\downarrow$ .”
157	Key Fact	In the second bullet, replace “21-hydroxylase deficiency” with “21 $\alpha$ -hydroxylase deficiency.”
163	Presentation	In the second to last indented bullet, replace “Diabetic peripheral neuropathy (loss of pain and vibration senses with a characteristic “stocking” distribution in the legs; increased risk of infection/injury leading to amputation); related to” with “Diabetic peripheral neuropathy (see above); related to....”
168	Answer Flashcard	Replace “Sulfonylureas increase insulin release from pancreatic $\beta$ cells through the activation of ATP-sensitive K+ channels.” with “Sulfonylureas increase insulin release from pancreatic $\beta$ cells through the inhibition of ATP-sensitive K+ channels....”
169	Dipeptidyl Peptidase 4 Inhibitors	In the heading, replace “DDP-4” with “DPP-4.”
190	Intrinsic Innervation	In the second paragraph, replace “sub0mucosal” with “submucosal.”

192	Flash Forward	Replace “VNH can cause obesity” with “Lesions of the VNH can cause obesity”
204	Table 3-10	In the Source column of the Somatostatin row, replace “D cells (duodenum)” with “D cells (stomach antrum)....”
220	Diagnosis	In the first indented bullet that represents the first stage, replace “Radiolabeled vitamin B <sub>12</sub> is injected” with “Unlabeled vitamin B <sub>12</sub> is injected....”
221	Duodenal Ulcers	In the last sentence, replace “NSAIDs and <i>H pylori</i> and NSAIDs are also associated risk factors” with “ <i>H pylori</i> and NSAIDs are also associated risk factors.”
224	Malabsorption Syndromes	In the first sentence of the paragraph below the bulleted list, replace “lactate deficiency” with “lactase deficiency....”
255	Aspartate Aminotransferase	In the Physiologic Action section, replace “Catalyzes the transfer of amino groups to form pyruvate” with “Catalyzes the transfer of amino groups to form oxaloacetate.”
256	Alanine Aminotransferase	In the Physiologic Action section, replace “Catalyzes the transfer of amino groups to form oxaloacetate” with “Catalyzes the transfer of amino groups to form pyruvate.”
258	Flash Forward (top of page)	Delete the second bullet and replace with “HbH (α thalassemia, three genes deleted)” and delete the third bullet and replace with “Hb Bart (α thalassemia, all four genes deleted).”
269	T Lymphocyte	In the fifth sentence, replace “suppressor T cells” with “regulatory T cells....”
274	Key Fact	Delete “Endometrial polyps in adult female” from the bulleted list.
275	Diagnosis	In the second sentence, replace “Peripheral smear shows <b>microcytic, hypochromic RBCs</b> microcytic, hypochromic RBCs (Figure 4-7B)” with “Peripheral smear shows <b>microcytic, hypochromic RBCs</b> (Figure 4-7B).”
290	Platelet Disorders	In the second paragraph, replace “which ranges from petechiae (1–2 mm, typically not seen in qualitative disorders), purpura (> 1 mm), ecchymoses (> 3 mm), to easy bruising” with “which ranges from petechiae (< 0.3 cm, typically not seen in qualitative disorders), purpura (0.3 cm–1 cm), ecchymoses (> 1 cm), to easy bruising....”
293	Platelet Function Abnormalities	At the end of the Bernard-Soulier disease bullet, add “hypoactive agglutination occurs when ristocetin is added.”  In the second sentence of the Glanzmann thrombasthenia bullet, replace “Blood smear shows no platelet clumping and agglutination with ristocetin cofactor assay” with “Blood smear will show platelet clumping and increased bleeding time.”
294	Disseminated Intravascular Coagulation	In the third bullet below Diagnosis, replace “Bone marrow” with “Peripheral smear.”
295	Vessel Wall Abnormalities	In the third bullet, replace “Inherited fibrillin defect” with “Inherited type III collagen....”

305	Diagnosis (top of page)	In the first sentence, delete the second “of coins.”
312	Figure 4-44	In the left-hand box, replace “MTX (inhibits thymidylate synthase) 5-FU (inhibits DHF reductase): ↓ thymidine synthesis” with “MTX (inhibits DHF reductase) , 5-FU (inhibits thymidylate synthase): ↓ thymidine synthesis.”
324	Figure 5-1	In the illustration, replace the arrow that points from calcitonin to osteoclasts with a red arrow that symbolizes that calcitonin is an inhibitor of osteoclasts.
325	Parathyroid Hormone	In the second sentence, replace “and indirectly activating osteoblasts via various cytokines” with “and indirectly activating osteoclasts via various cytokines.”
325	Second Key Fact	Replace “Laron syndrome” with “Laron syndrome.”
327	Table 5-1	In the key, replace “AV, atrioventricular” with “AV, arteriovenous.”
328	Key Fact	In the first sentence, delete the extra “a.”
336	Figure 5-14	Replace “Maxillary n. (V1)” with “Maxillary n. (V2),” and replace “Mandibular n. (V2)” with “Mandibular n. (V3).”
348	Larynx	In the first sentence of the second paragraph, replace “tylohyoid” with “stylohyoid.”
353	Nerve Damage Affecting the Muscles of the Lower Limb	In the second bullet, replace “extension of the thigh” with “extension of the knee....”
353	Common Pathology of the Knee	In the second sentence of the Baker cyst bullet, replace “it is important to distinguish between a cyst and a ruptured deep vein thrombosis (DVT)” with “it is important to distinguish between a ruptured cyst and deep vein thrombosis (DVT).”
360	Wound Healing	In the first bullet, replace “via fibroblast deposition of type II collagen” with “via fibroblast deposition of type III collagen....”  In the second bullet, replace “Fibrous scar formation as type II collagen” with “Fibrous scar formation as type III collagen....”
362	Presentation	In the last sentence, add “should be ruled out” to the end of the sentence so that it reads, “If neurologic symptoms such as numbness, weakness, or radiculopathy accompany back pain, an emergent spinal cord and cauda equina compression should be ruled out.”
385	Scleroderma/ Systemic Sclerosis	In the second sentence, replace “pace” with “face.”
387	Diagnosis	In the third sentence of the second paragraph, replace “ In DM, endomysial inflammation occurs” with “ In DM, perimysial inflammation occurs....”
392	Staphylococcal Scalded Skin Syndrome	In the last sentence of the paragraph, replace “by sloughing of the upper layers of the dermis” with “by sloughing of the upper layers of the epidermis....”

404	Selective Estrogen Receptor Modulators (SERMs)	In the second sentence of the Mechanism paragraph, replace “recruit osteoclasts” with “inhibit osteoclasts.”
417	Figure 6-7	Replace “Comparison of Arnold-Chiari syndrome types I and II and Dandy-Walker syndrome. [A] Arnold-Chiari syndrome is much more common...” with “Comparison of Chiari malformation type I, Arnold-Chiara type II, and Dandy-Walker syndrome. [A] Representation of features of both malformations. Arnold-Chiari syndrome is much more common....”
451	First-order neurons	In the third bullet, replace “branch off the main axon and synapse on Ia fibers...” with “branch off the main axon and synapse on alpha fibers or inhibitory interneurons....”
482	Table 6-25	In the third entry of the Presentation column on the Alzheimer disease row, replace “mutations in presenilin 1 and 2 on chromosomes 1 and 14, respectively” with “mutations in presenilin 1 and 2 on chromosomes 14 and 1, respectively....”
507	Central Nervous System Neurotransmitters	In the fourth sentence of the first paragraph, replace “patents” with “patients.”
508	Figure 6-68	Replace “Tyrosine hydrolase” with “Tyrosine hydroxylase.”
581	Child Abuse	In the first sentence of the first paragraph, replace “(ie, Child Protective Services [CPS])” with “(ie, Child Protective Services [CPS] or equivalent)....”
600	Table 8-6	In the key, replace “TBW, total body weight” with “TBW, total body water.”
617	Buffer Systems	In the equation at the top of the page, add “=” so that it reads, “ $\text{pH} = -\log [\text{H}^+] = \text{pK}_a + \log \dots$ ”
622	Acid-Base Problem Solving	In the fifth bullet, replace “if over 20, then” with “if over 12, then....”
641	Figure 8-38	In the Prerenal Labs section (bottom left), replace “Urine sodium < 10 mEq/L” with “Urine sodium < 20 mEq/L.” In the Renal Labs section (bottom center), replace “Urine sodium > 20 mEq/L” with “Urine sodium > 40 mEq/L.”
651	Figure 8-43	In the green right-hand box, replace “Hypovolemic” with “Hypervolemic.”
666	Pseudohermaphroditism	In the first bulleted point, replace “syndrome” with “syndrome”
678	Figure 9-21	Replace the label “Ductus deferers” with “Ductus deferens”
720	Choriocarcinoma	Delete the third bullet and replace with “If pure choriocarcinoma, has worse prognosis than gestational choriocarcinoma.”
778	Shunt	In the last sentence, replace “Since the $\text{Pao}_2$ is unaffected” with “Since the $\text{PAO}_2$ is unaffected....”